Remarks

Reconsideration of the application is respectfully requested in view of the foregoing amendments and following remarks. With entry of the present amendment, claims 1, 2, 7 and 8 are pending in the application.

Statutory Subject Matter

Claim 8 has been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. As per the Office's suggestion, claim 8 is amended to modify the term "computer readable medium" to instead read --computer readable storage medium--. Claim 8 therefore should be considered statutory.

Patentability Over Kim and Sun

Claims 1 and 8 have been rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Kim. Claims 2 and 4-7 have been rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Sun. Claim 3 has been rejected under 35 U.S.C. § 103(a) as allegedly obvious over Sun in view of Kim. Applicants respectfully traverse the rejections as applied to the claims, as amended above.

Claims 1, 2, 7 and 8 all recited limitations directed to the use of sampled statistics for measuring edge presence and strength (at a subset of pixel locations fewer than all pixel locations along a block edge segment) in making a conditional deblocking filtering determination applied to all pixel locations along the block edge segment. (*See*, Specification, at page 2, lines 22-27.) For example, claim 1 (as amended) recites,

> for a block edge segment of a block portion of the video where the block edge segment has a length of plural pixels, sampling an edge strength measure at a subset of pixel locations less than all pixel locations along the block edge segment's length;
>
> determining whether to filter the block edge segment based on the sampled edge strength measure;
>
> filtering the block edge segment conditioned on the determination, wherein the determination based on the sampled edge strength measure at the subset of pixel locations applies to filtering at all pixel locations along the block edge segment. (Emphasis added)

Claims 2, 7 and 8 contain similar limitations.

Sun fails to teach of suggest filtering applied at all locations along a block edge conditionally determined based on an edge strength measure sampled at a subset of pixel locations less than all pixel locations along the block edge segment.

The Office asserts that the language "sampling an edge strength measure at a subset of pixel locations" reads on the action depicted at decision block 409S in Figure 4 and discussed at column 7, lines 16-20 in Kim. However, the decision at 409S appears to merely control whether the deblocking filtering action (a low pass filter of the row) shown at 410S is applied individually at the pixel location (row or column of pixels v_0 to v_8). Actions 411S and 412 S appear to be a loop end check whether the process 401S-410S has been separately performed at each pixel location of a vertical or horizontal boundary. (*See*, Kim at column 7, lines 22-29.) Kim therefore lacks any teaching or suggestion that the measure 409S for one pixel location on a block edge (row or column) determines whether filtering is applied at any other pixel locations, much less to all pixel locations along the full block edge segment as recited in the present claims. In other words, Kim fails to teach or suggest sampling an edge strength measurement at fewer than all pixel locations along an edge, and then determining based on the sampled measurement whether to apply deblocking filtering at all pixel locations along the edge.

The Sun reference is cited by the Office for the proposition of basing a deblocking filtering decision on frame type, motion vectors, and non-residual error. Sun also lacks any teaching or suggestion to apply deblocking filtering at all locations along a block edge conditionally determined based on an edge strength measure sampled at a subset of pixel locations less than all pixel locations along the block edge segment. This feature therefore would be missing from any combination of Sun and Kim.

For at least this reason, claims 1, 2, 7 and 8 are allowable over the art of record.